UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

25226 7590 05/11/2011 MORRISON & FOERSTER LLP 755 PAGE MILL RD PALO ALTO, CA 94304-1018 EXAMINER

JANG, CHRISTIAN YONGKYUN

ART UNIT PAPER NUMBER

3735

DATE MAILED: 05/11/2011

I	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/561,561	05/26/2006	Lee R. Carlson	643132000200	9919

TITLE OF INVENTION: BREATH END- TIDAL GAS MONITOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	08/11/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. ISI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

IL PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

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INSTRICTIONS. This form should be used for transmitting the ISSUE FEE and PUBLICATION IEE (if required.) Blocks I through 5 should be completed where appropriate All Intellect correspondence including the Patent, advance order and softlication of mainteanance free will be mailed to the turned correspondence address; a indicated unless corrected below or directed otherwise in Block I, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee not conflictations.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

25226 7590 05/11/2011 MORRISON & FOERSTER LLP 755 PAGE MILL RD PALO ALTO, CA 94304-1018 Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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I hereby certify that this Feeds | Tansmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (\$71) 273-2885, on the date indicated below.

(Depositor's name)	
(Signature)	
(Date)	

 APPLICATION NO.
 FILINO DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10561\_561
 05/26/2006
 Lee R. Carlson
 643132000220
 9919

 TITLE OF INVENTION: BREATHER IND. TIDAL GAS MONITOR
 643132000220
 9919

APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional YES \$755 \$300 SO \$1055 08/11/2011 EVAMINED ART UNIT CLASS-SUBCLASS JANG, CHRISTIAN YONGKYUN 3735 600-532000 Change of correspondence address or indication of "Fee Address" (37) 2. For printing on the patent front page, list the names of up to 3 registered patent attorneys or agents OR, alternatively. ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. (2) the name of a single firm (having as a member a "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is Number is required. listed, no name will be printed.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignce is identified below, no assignce data will appear on the patent. If an assignce is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature Date

Typed or printed name Registration No.

This collection of information is required by 37 CFR. 1311. The information is required to obtain or retain a benefit by the public which is to file fand by the USPTO1 process) an application. Confidentiality is governed by 35 USC. 122 and 37 CFR. 14.1 his collection is estimated to take 12 minutes to complete, including guithering, preprinting, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete with form and/or suggestions for recluting this burden, should be sent to the Chief Information Officer. U.S. Patertanett, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-1450. DO NOT SEXD FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

□ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).



# UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE Juited States Patent and Trademark Office address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/561,561	05/26/2006	Lee R. Carlson	643132000200	9919	
25226 7590 05/11/2011			EXAMINER		
MORRISON & F		JANG, CHRISTL	AN YONGKYUN		
755 PAGE MILL RD					
PALO ALTO, CA	94304-1018	ART UNIT	PAPER NUMBER		

2725 DATE MAILED: 05/11/2011

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1148 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1148 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom
  of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of
  records may be disclosed to the Department of Justice to determine whether disclosure of these
  records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2004 and 2006. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

# Notice of Allowability

Application No.	Applicant(s)	
10/561,561	CARLSON ET AL.	
Examiner	Art Unit	
CHRISTIAN JANG	3735	

The MAILING DATE of this communication appears on the cover sheet with the correspondence address
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

The MAILING DATE of this communication appears on the All claims being allowable, PROSECUTION ON THE MERITS IS (OR REM. herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other: NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. To of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPIC.	MAINS) CLOSED in this application. If not included appropriate communication will be mailed in due course. THIS This application is subject to withdrawal from issue at the initiativ
1. $\square$ This communication is responsive to $\underline{4/21/11}$ .	
2. The allowed claim(s) is/are 13,22-27 and 30.	
	belived.  Delived in Application No  have been received in this national stage application from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this co- noted below. Failure to timely comply will result in ABANDONMENT of the THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Not INFORMAL PATENT APPLICATION (PTO-152) which gives reason	
CORRECTED DRAWINGS ( as "replacement sheets") must be subniced in including changes required by the Notice of Draftsperson's Pate to Draft Sperson's Pate to Draft Sperson's Pate including changes required by the attached Examiner's Amendr Paper No./Mail Date  Identifying indicts such as the application number (see 37 CFR 1.84(c)) she	ont Drawing Review (PTO-948) attached  ment / Comment or in the Office action of  build be written on the drawings in the front (not the back) of
each sheet. Replacement sheet(s) should be labeled as such in the header  6. DEPOSIT OF and/or INFORMATION about the deposit of BIG attached Examiner's comment regarding REQUIREMENT FOR THE	DLOGICAL MATERIAL must be submitted. Note the
Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)	Notice of Informal Patent Application     Interview Summary (PTO-413),     Paper No./Mail Date     ⊠ Examiner's Amendment/Comment
S. Minformation Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4/21/11     Examiner's Comment Regarding Requirement for Deposit     of Biological Material	8. M Examiner's Statement of Reasons for Allowance 9. Cher
/C. J./ Examiner, Art Unit 3735	/Patricia Mallari/ Primary Examiner, Art Unit 3735

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### EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lisa Amii on 5/3/11.

The application has been amended as follows:

- Claims 1-8 and 14-21 are cancelled.
- Claim 13 line 11 "measuring at least one" has been amended to --measuring, using a gas analyzer, at least one--
- Claim 30 line 10 "measuring at least one" has been amended to --measuring, using a gas analyzer, at least one--
- 5. The following is an examiner's statement of reasons for allowance:
  - a. As to claim 13, the prior art of record fails to teach a step of diverting a continued flow of air past a isolated sample volume, and upon confirmation of a change from exhalation to inhalation, diverting said continued flow of air to displace said isolated sample volume.
  - As to claim 22, the prior art of record fails to teach the three flow selector valves and the branching component configured as claimed.
  - c. As to claim 30, the prior art of record fails to teach a step of diverting a continued flow of gas past a isolated sample volume, and upon confirmation of a

Application/Control Number: 10/561,561

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transition corresponding to a level of a periodic element reaching a predetermined threshold, diverting said continued flow of gas to displace said isolated sample volume.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTIAN JANG whose telephone number is (571)270-3820. The examiner can normally be reached on Mon-Friday (9-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Patricia C. Mallari/ Primary Examiner, Art Unit 3735

CJ /C. J./ Examiner, Art Unit 3735 5/3/11